

IN THE DRAWINGS

Amended Figures:

Fig. 1A:

Number "16" of Hub has been changed to number "46".

Fig. 1B:

Number "10" has been changed to number "40".

Number "16" of Hub has been changed to number "46".

Replacement figures having these edits are attached.

Remarks/Arguments

The Examiner is thanked for the careful review of this Application. 9 paragraphs have been amended to correct informalities. No new matter has been introduced. Claims 1, 3, 9, 11, 12, and 16-20 have been amended. Claims 1-10, 12-18, 20-23, and 25, and 26 are pending after entry of the present Amendment. Amendments were made to the claims in response to the Office's rejections and to clarify the claimed invention. The amendments do not introduce new matter. Figures 1A and 1B have been amended to correlate to the specification. No new matter has been introduced.

Rejections under 35 U.S.C. § 112:

Claims 3, and 9-16 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the art.

Applicant agrees with the Examiner's statement that Applicant's specification teaches installing of an operation system on a target storage device, not on a server. Dependent claim 3 has been amended to remove "installing the operating system on" and to replace them with "setting up" before "an additional server". Claim 3 has been further amended to clarify that the additional server is "to be booted up by the target storage device over the network." Independent claim 9 has been amended to remove "server" and to replace it with "target storage device" after "A method to install an operating system on a" in the preamble. Claims 10-16 are rejected by virtue of their dependency on claim 9. As a consequence, Applicant respectfully requests the removal of the rejections to claims 3, and 9-16.

Claims 1-8, and 17-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter.

Claim 1 has been amended to use the correct term "the target storage device" in line 6 of the original claim. Claim 17 has been amended to replace "a storage device" with "a target storage device" in the preamble, which provides sufficient antecedent basis for the limitation "the target storage device" in line 11 of the original claim. Claim 19 has been amended to recite the limitation "the server", instead of "a server", in line 6 of the original claim to clarify that the server recited in line 6 of claim 19 is the same server recited in claim 17. By the same reason as

claim 19, claim 20 has been amended to recite the limitation “the server”, instead of “ a server”. Claims 2-8, and 18-20 are rejected by virtue of their dependency of claims 1 and 17, respectively. As a consequence, Applicant respectfully requests the removal of the rejections to claims 1-8, and 17-20.

Rejections under 35 U.S.C. § 101:

Claims 9-16 are rejected under 35 U.S.C. 101 because the disclosed invention is inoperative and therefore lacks utility.

As described above, Applicant agrees with the Examiner’s statement that Applicant’s specification teaches installing of an operation system on a target storage device, not on a server. Independent claim 9 has been amended to remove “server” and to replace it with “target storage device” after “A method to install an operating system on a” in the preamble to correctly define the claimed invention. Claims 10-16 are rejected by virtue of their dependency on claim 9. As a consequence, Applicant respectfully requests the removal of the rejections to claims 9-16.

Rejections under 35 U.S.C. § 102:

Claims 1, 3, and 5-7 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,990, 573 to *Chrian et al.*

Regarding amended claim 1, *Cherian et al.* teaches a system and a method for sharing storage to boot multiple servers. Servers 20, 22 , and 24 are coupled to a shared storage system 40 which includes a RAID controller 42 having access to hard disk drives 44. The RAID controller 42 partitions these disk drives into multiple physical or logical storage sub-divisions, such as logical unit numbers (LUNs) 0 through 4.

Cherian et al. does not teach “installing an operating systemin the target storage device selected from the plurality of independent storage devices on the network wherein the location of the target storage device is designated by an internet protocol (IP) address,” as defined in independent claim 1. Servers 20, 22 and 24 of *Cherian et al.* access the shared storage system 40 through the RAID controller 42. The hard disk drives 44 of *Cherian et al.* are not independent storage devices that can be directly accessed by the servers 20, 22, and 24. The RAID controller 42 partitions the hard disk drives 44 into multiple physical and logical sub-divisions to be used by the servers 20, 22, and 24. Since RAID controller 42 determines how the

hard drives 44 are utilized, hard drives 44 are not independent storage devices that can be accessed from outside. Therefore, the system of *Cherian et al.* does not allow users to install an operating system in a target storage device selected from a plurality of independent storage devices. In addition, *Cherian et al.* does not teach the location of the target storage device is designated by an IP address. Therefore, Applicant respectfully requests the withdrawal of the rejection to claim 1.

Claims 3, and 5-7 are dependent claims of independent claim 1. Based on the argument described above for claim 1, claims 2-7 are also patentable over *Cherian et al.* Therefore, Applicant respectfully requests withdrawals of the rejections to claims 3, and 5-7.

Claims 17, 19, and 20 are rejected under 25 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5, 974,547 to *Klimenko*.

Regarding amended claim 17, *Klimenko* teaches a technique for reliable network booting of an operating system to a client computer 10. The client computer 10 is booted by using a hard disc 54 in a server 50. *Klimenko* does not teach “retrieving an operating system boot loader at a first sector of the target storage device selected from the plurality of independent storage devices.” *Klimenko* teaches using a single hard disc 54. *Klimenko* does not teach a plurality of independent storage devices to store an operating system for booting. *Klimenko* also does not teach storing an operating system in a target storage device selected from the plurality of independent storage devices to be retrieved. Therefore, Applicant respectfully requests withdrawals of the rejection to claim 17.

Claims 19 and 20 are dependent claims of independent claim 1. Based on the argument described above for claim 17, claims 19 and 20 are also patentable over *Klimenko*. Therefore, Applicant respectfully requests the withdrawal of the rejections to claims 19 and 20.

Rejections under 35 U.S.C. § 103(a):

Claims 2, 4, and 8-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Cherian et al.* in view of U.S. Patent No. 6,775,830 to *Matsunami et al.*

Claims 2, 4, and 8 are dependent claims of independent claim 1. Based on the argument described above for claim 1, claims 2, 4, and 8 are patentable over *Cherian et al.* Regarding claim 2, the Examiner states that *Cherian et al.* teaches the method of claim 1, including the

usage of an IP address to determine the location of the target storage device. Applicant cannot find such teaching in *Cherian et al.* Therefore, Applicant respectfully requests the Examiner to point out the paragraphs that show such teaching. *Matsunami et al.* teaches a method of installing software on a network. *Matsunami et al.* teaches a storage subsystem 1, but *Matusnami et al.* does not teach a plurality of independent storage devices. In addition, *Matsunami et al.* does not teach a target storage device that can be designated by an IP address. Therefore, *Matsunami et al.* does not teach “installing an operating systemin the target storage device selected from the plurality of independent storage devices on the network wherein the location of the target storage device is designated by an internet protocol (IP) address,” as defined in claim 1. *Cherian et al.* and *Matsunami et al.*, alone or in combination, do not teach all elements of independent claim 1. Therefore, independent claim 1 is patentable over *Cherian et al.*, in view of *Matsunami et al.* As a consequence, claims 2, 4, and 8 are patentable over *Cherian et al.*, in view of *Matsunami et al.* Applicant respectfully requests the withdrawal of the rejections to claims 2, 4, and 8.

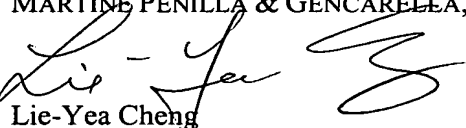
Regarding amended independent claim 9, *Cherian et al.* teaches a system and a method for sharing storage to boot multiple servers. Servers 20, 22, and 24 are coupled to a shared storage system 40 which includes a RAID controller 42 having access to hard disk drives 44. The RAID controller 42 partitions these disk drives into multiple physical or logical storage sub-divisions, such as logical unit numbers (LUNs) 0 through 4.

Cherian et al. does not teach “determining the plurality of independent storage devices located in the subsystem,” as defined in claim 9. The servers 20, 22 and 24 of *Cherian et al.* access the shared storage system 40 through the RAID controller 42. The hard disk drives 44 of *Cherian et al.* are not independent storage devices that can be directly accessed by the servers 20, 22, and 24. The RAID controller 42 partitions the hard disk drives 44 into multiple physical and logical sub-divisions to be used by the servers 20, 22, and 24. Since RAID controller 42 determines how the hard drives 44 are utilized, hard drives 44 are not independent storage devices that can be accessed from outside. Based on the same argument, *Cherian et al.* also does not teach “installing the operating system in the target storage device selected from a plurality of independent storage devices in a subsystem using block data transfer,” as defined in claim 9. *Matsunami et al.* teaches a method of installing software on a network. *Matsunami et al.* teaches a storage subsystem 1, but *Matusnami et al.* does not teach a plurality of independent storage

devices. Therefore, *Matsunami et al.* does not teach “determining the plurality of independent storage devices located in the subsystem,” as defined in claim 9. Based on the same argument, *Matsunami et al.* also does not teach “installing the operating system in the target storage device selected from a plurality of independent storage devices in a subsystem using block data transfer,” as defined in claim 9. *Cherian et al.* and *Matsunami et al.*, alone or in combination, do not teach all elements of independent claim 9. Therefore, claim 9 is patentable over *Cherian et al.*, in view of *Matsunami et al.* As a consequence, Applicant respectfully requests withdrawal of the rejection to claim 9.

Claims 10-16 are dependent claims of independent claim 9. Based on the argument described above for claim 9, claims 10-16 are patentable over *Cherian et al.* in view of *Matsunami et al.* As a consequence, Applicant respectfully requests the withdrawal of the rejections to claim 10-16.

In consequence, the Applicant respectfully submits that all pending claims are in condition for allowance, and respectfully request examination on the merits of the subject application. Accordingly, a notice of allowance is respectfully requested. If the Examiner has any questions concerning the present Amendment, the Examiner is kindly requested to contact the undersigned at (408) 774-6924. If any additional fees are due in connection with filing this Amendment, the Commissioner is also authorized to charge Deposit Account No. 50-0805 (Order No. ADAPP234B). A duplicate copy of the transmittal is enclosed for this purpose.

Respectfully submitted,
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